## **REMARKS**

## **SUMMARY:**

The present application sets forth original claims 1-20, of which claim 1 is the sole independent claim. Amendments are submitted and requested entry for claims 1-20. The amendments to claims 1-20 are submitted as clarifying amendments, not intended to result in any other substantive effect with respect to scope, and otherwise do not add any new matter to the subject application.

Original and previously amended claims 1-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Published Patent Application. No. 2001/0056362 to <u>Hanagan et al.</u> (<u>Hanagan</u>) in view of U. S. Published Patent Application. No. 2003/0074463 to <u>Swartz et al.</u> (<u>Swartz</u>).

Responses to the rejection summarized above are hereafter provided with respect to each individual argument presented by the Examiner.

## REJECTION OF CLAIMS 1-20 (35 U.S.C. §103(a)):

Original and previously amended claims 1-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Published Patent Application. No. 2001/0056362 to Hanagan et al. (Hanagan) in view of U. S. Published Patent Application. No. 2003/0074463 to Swartz et al. (Swartz). Based on the following remarks, Applicants respectfully traverse such alleged anticipation.

Before setting forth a discussion of the prior art applied in the recent Office Action, it is believed that a general discussion of the disclosed subject matter may be helpful as background to a discussion of the specifically claimed subject matter. In general, the present technology is directed toward a customer care and billing system. More particularly, as discussed starting with the Brief Summary Of The Invention on page 4 of the substitute specification, the general area of concern is to provide a

customer care and billing system, especially for communication services, wherein changes or extensions of the system caused by changed demands of the system user can rapidly be carried out causing as little programming effort as possible. As the system comprises a distributed component architecture including components attributed in correspondence to the relevant services offered, wherein the components are able to communicate with each other directly via interfaces, a flexible configuration of the business logic is facilitated so that customer demands can be fulfilled with a minimum of implementation modifications.

Prior to the present disclosure, it has been known that certain customer care and billing systems have operated in accordance with the general configuration discussed with reference to Prior Art Fig. 1 of the present application. Generally, per such representation, such Prior Art provided a system wherein individual components, for example, components 3A, 3B 3C, 220, 22, 24, 26, and 28 in Prior Art Fig. 1, communicated only with a central relational database 17. The Prior Art system represented provided no means for individual components to communicate with each other except for communications through the central database 17.

The basic concept of the present subject matter may readily be observed by comparison of Prior Art Fig. 1 with Fig. 2 of the present application (which illustrates the basic operation thereof). With reference to Fig. 2, it will be observed that the present technology provides individual components 5 with the ability to communicate with other components 5 by way of interfaces 10 without having to pass data through database 7.

With such brief background in mind, and before setting forth a discussion of the referenced prior art citations, it is respectfully submitted that controlling case law has frequently addressed rejections under Section 103. In addition to the well-known required multi-step analysis of <u>Graham v. John Deere Co.</u>, 381 U.S. 1, 148 U.S.P.Q. 459 (S. Ct. 1966), and its progeny, the Court of Appeals for the Federal Circuit has on numerous occasions offered its guidance concerning the propriety of Section 103 rejections.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined <u>only</u> if there is some suggestion or incentive to do so<sup>1</sup>. (emphasis original)

The task of the Patent Office is essentially a burden of proof not just to show prior patents with selected elements similar to respective parts of a claimed combination, but to show <u>teachings</u> to support obviously <u>combining</u> the elements in the manner claimed.

Virtually all inventions are necessarily combinations of old elements. The notion, therefore, that combination claims can be declared invalid merely upon finding similar elements in separate prior patents would necessarily destroy virtually all patents and cannot be the law under the statute, '103.<sup>2</sup> (footnotes omitted)

In <u>In re Deminski</u>, 230 U.S.P.Q. 313 (Fed. Cir. 1986), the court reversed a Patent Office Board of Appeals decision rejecting claims for obviousness, saying: "There [was] nothing in the prior art references, singly or in combination, 'to suggest the desirability, and thus the obviousness' of the [claimed subject matter]." <u>Id</u>. at 315; emphasis original. The court noted that the relied-on reference did not address the technical problem addressed by the claimed invention (and in fact taught away from the Applicant's invention), and stated the well-established principle that "[h]indsight analysis is clearly improper. . . ." <u>Id</u>. at 316.

In <u>Bausch & Lomb v. Barnes-Hind/Hydrocurve</u>, 230 U.S.P.Q. 416 (Fed. Cir. 1986), the court vacated a district court holding of invalidity for obviousness. In doing so, the district court was criticized for viewing teachings from the prior art in isolation, instead of considering the prior art references in their entirety; for entering the tempting but forbidden zone of hindsight analysis; for failing to view the claimed invention as a whole; and for disregarding express claim limitations. <u>Id.</u> at 419, 420.

<sup>1</sup> ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

<sup>2</sup> Panduit Corp. v. Dennison Manufacturing Co., 1 U.S.P.Q. 2d 1593, 1603 (Fed. Cir. 1987).

It is <u>impermissible</u> within the framework of section 103 <u>to pick</u> and <u>choose</u> from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art<sup>3</sup>. (emphasis added)

The Supreme Court in Graham and Adams . . . foreclosed the use of substitutes for facts in determining obviousness under section 103. The legal conclusion of obviousness <u>must be supported by facts</u>. [footnote omitted] Where the legal conclusion is not supported by facts, it cannot stand. . . .

A rejection based on section 103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art.... It [the Patent Office] may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis....

[W]e may not resolve doubts in favor of the Patent Office determination when there are deficiencies in the record as to the necessary factual bases supporting its legal conclusion of obviousness<sup>4</sup>. (emphasis original)

Finally, the PTO Board of Appeals noted the following in Ex parte Clapp: "[S]implicity and hindsight are not proper criteria for resolving the issue of obviousness.<sup>5</sup>"

The following analysis of the present rejection is respectfully offered with guidance from the foregoing controlling case law decisions.

With reference now in particular to the outstanding rejection of previously pending claims 1-20 under 35 U.S.C §103(a) as being allegedly unpatentable over U.S. Published Patent Application. No. 2001/0056362 to <u>Hanagan et al. (Hanagan</u>) in view of U.S. Published Patent Application. No. 2003/0074463 to <u>Swartz et al.</u> (<u>Swartz</u>), it

<sup>3</sup> Bausch & Lomb v. Barnes-Hind/Hydrocurve, 230 U.S.P.Q. 416, 419 (Fed. Cir. 1986).

<sup>4</sup> In re Warner, 379 F.2d 1011, \_\_\_, 154 U.S.P.Q. 173, 177, 178 (C.C.P.A. 1967).

<sup>5</sup> Ex parte Clapp, 227 U.S.P.Q. 972, 973 (PTO Bd. App. 1985).

should first be noticed that sole independent claim 1 (with emphasis added) is directed to "A customer care and billing system for communication services, comprising at least one database for storage and retrieval of data, the database formed as a server; a plurality of clients communicating with the at least one database, or at least one application server with accompanying clients, the server communicating with the at least one database; and a framework, wherein relevant services corresponding to desired customer care or billing processes are offered to the system user, characterized in that the system comprises a distributed component architecture including components attributed in correspondence to the relevant services offered, wherein the components are able to communicate with each other directly via interfaces."

The <u>Hanagan</u> citation asserted by the PTO in support of the subject rejection is directed to a modular convergent customer care and billing system that, respectfully, is very similar to that illustrated by applicants in Prior Art Fig. 1, in that <u>Hanagan</u>'s system is specifically designed to provide customer information <u>via a single interface</u> through a single consolidated customer database.

As described by <u>Hanagan</u>, starting at paragraph [0049] of his specification (emphasis added):

[0049] Due to the ever-evolving nature of telecommunications, the customer care and billing solutions must continue to evolve. The **key concepts which need to be provided** to differentiate from and improve over past and existing products are: **convergence and modularity**.

And further in paragraph [0054] of Hanagan:

[0054] The above objects can be attained by a system that includes a set components that can offer a complete solution to a client or can be partitioned to offer solutions to specific areas. The components are modular. The components are independent and integrated containing all the necessary processes and inputs and outputs to function independently. The components can also be integrated together into a system where the components work together. The set of components are also convergent by allowing all services to be provided and viewed via a single interface through a single consolidated customer database independent of the type of service(s) being provided to a customer.

Appropriately, while the most recent Office Action recognizes that <u>Hanagan</u> discloses some of the features of the present subject matter, the recent Office Action

recognizes (middle of numbered page 3) that <u>Hanagan</u> does not "... explicitly disclose that the components communicate with each other directly via interfaces."

In an effort to cure such clear and utter deficiency of the <u>Hanagan</u> teaching, the recent Office Action cites U. S. Published Patent Application. No. 2003/0074463 to <u>Swartz et al.</u> (<u>Swartz</u>) as allegedly supplying such disclosure which, according to the recent Office Action would have rendered it "... obvious to one of ordinary skill in the art at the time the invention was made to modify the billing and customer care system of Hanagan to include the direct interface or interaction as taught by Swartz in order to deliver an integrated technical architecture which shares common integrated technical architecture with shared services."

Respectfully, it is not applicants' intention, <u>nor is it applicants' claim</u>, that there be a system configured "...to deliver an integrated technical architecture which shares common integrated technical architecture with shared services." Rather, it is applicants' specific claim that there be established a customer care and billing system that includes plural components that have not only the capability to exchange data with a central database but also to communicate directly with other components in the system without having to pass data through the central database. No combination of <u>Hanagan</u> with <u>Swartz</u> can obviously achieve such affirmative functionality.

Further with reference to <u>Swartz</u>, applicants respectfully disagree with any characterization of <u>Swartz</u> that suggests that <u>Swartz</u> discloses any direct communication between components. In fact, it is applicants' belief that, if anything, <u>Swartz</u>'s system operates in a very similar manner to that of the Prior Art of Fig. 1 of the present application.

More specifically, <u>Swartz</u> states starting at paragraph [0007] in his Summary of the Invention that (emphasis added):

[0007] To overcome the limitations in the prior art described above, and to overcome other limitations that will become apparent upon reading and understanding the present specification, the present invention generally discloses a management interface between a core telecommunication system and a local service provider, and more particularly describes a highly flexible and expandable system to accommodate new products and services.

In addition, in paragraph [0008], Swartz states (emphasis added) that:

0008] A system, method and article of manufacture are provided for interfacing with a core telecommunication system and a local service provider. First, a core telecommunication system is interfaced for handling core telecommunication system requests and responses received from the core telecommunication system and translated to a predetermined protocol. Similarly, a local service provider is interfaced for handling local service provider requests and responses received from the local service provider. The local service provider requests and responses are also translated to the predetermined protocol. In use, the core telecommunication system requests and responses are communicated with the local service provider and the local service provider requests and responses are communicated with the core telecommunication system for management purposes. Also, the system automatically manages the transfer of data between at least one core telecommunication system and at least one local service provider wherein the management is accomplished using a knowledge base.

Respectfully, per proper application and consideration of controlling case law, in order for <a href="Swartz">Swartz</a> to teach any obvious modification of <a href="Hanagan">Hanagan</a> such that would result in formation of a system in accordance with the presently <a href="Claimed">Claimed</a> subject matter, <a href="Swartz">Swartz</a> would have to teach that the various "local service providers" were capable of communicating with each other, in addition to communicating with the core telecommunications system for management purposes. <a href="Applicants have been unable to find any such teaching within Swartz">Swartz</a>.

On the other hand, <u>assuming hypothetically</u> that such a teaching were present in <u>Swartz</u>, applicants would strongly disagree that such would render obvious the presently claimed subject matter because any such hypothetical teaching would <u>teach</u> <u>away</u> from <u>Hanagan</u>'s specific disclosure per the above-quoted paragraph [0054] of <u>Hanagan</u>, which stated in pertinent part that (emphasis added):

The set of components are also convergent by allowing all services to be provided and viewed <u>via a single interface through a single consolidated</u> <u>customer database</u>.

Simply put, no suggestion has been found in either <u>Hanagan</u> or <u>Swartz</u> that discloses or makes obvious a system <u>wherein</u> the components are able to communicate

with each other directly via interfaces, as specifically and affirmatively recited in sole independent claim 1.

In light of the above Remarks, Applicants respectfully submit that no combination or modification of <u>Hanagan</u> in view of <u>Swartz</u> makes obvious present claims 1-20, and acknowledgement of the same is respectfully requested. As such, withdrawal of the obviousness rejection of such claims is respectfully requested.

Claims 2-20 variously depend from otherwise allowable claim 1 and thus should also be allowable. Acknowledgment of the same is earnestly and respectfully requested.

## **CONCLUSION:**

Inasmuch as all outstanding issues have been addressed, it is respectfully submitted that the present application, including claims 1-20, is in complete condition for issuance of a formal Notice of Allowance, an action to such effect is earnestly solicited. The Examiner is invited to telephone the undersigned at his convenience should only minor issues remain after consideration of this response in order to permit early resolution of the same or if he has any questions regarding this matter.

Respectfully submitted,

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April 20, 2006

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